



## NUCLEAR REGULATORY COMMISSION

[Docket No. 50-201; NRC-2021-0175]

New York State Energy Research and Development Authority

Irradiated Nuclear Fuel Processing Plant

Western New York State Nuclear Service Center

**AGENCY:** Nuclear Regulatory Commission.

**ACTION:** Environmental assessment and finding of no significant impact; issuance.

**SUMMARY:** The U.S. Nuclear Regulatory Commission (NRC) is issuing an environmental assessment (EA) and finding of no significant impact (FONSI) related to a request to amend Facility Provisional Operating License No. CSF-1 for provisional operation of the Irradiated Nuclear Fuel Processing Plant located at the Western New York Nuclear Service Center (WNYNSC), in Cattaraugus and Erie Counties, New York. The requested amendment would amend the Radiation Protection Program for the “retained premises of the licensed area” for modernization. In addition, the New York State Energy Research and Development Authority (NYSERDA), the licensee, requested that the license be amended to clarify NYSERDA’s health and safety and other responsibilities under the license. NYSERDA defines the “retained premises of the licensed area” as the area consisting of the WNYNSC, not including the U.S. Department of Energy (DOE) West Valley Demonstration Project (WVDP) premises and the State Licensed Disposal Area (SDA).

**DATES:** The EA and FONSI referenced in this document are available on November 2, 2021.

**ADDRESSES:** Please refer to Docket ID **NRC-2021-0175** when contacting the NRC about the availability of information regarding this document. You may obtain publicly available information related to this document using any of the following methods:

- **Federal Rulemaking Website:** Go to <https://www.regulations.gov> and search for Docket ID **NRC-2021-0175**. Address questions about Docket IDs in Regulations.gov to Stacy Schumann; telephone: 301-415-0624; email: Stacy.Schumann@nrc.gov. For technical questions, contact the individual listed in the **FOR FURTHER INFORMATION CONTACT** section of this document.

- **NRC's Agencywide Documents Access and Management System (ADAMS):** You may obtain publicly available documents online in the ADAMS Public Documents collection at <https://www.nrc.gov/reading-rm/adams.html>. To begin the search, select "Begin Web-based ADAMS Search." For problems with ADAMS, please contact the NRC's Public Document Room (PDR) reference staff at 1-800-397-4209, 301-415-4737, or by email to [pdr.resource@nrc.gov](mailto:pdr.resource@nrc.gov). The ADAMS accession number for each document referenced in this notice (if that document is available in ADAMS) is provided the first time that a document is referenced.

- **Attention:** The PDR, where you may examine and order copies of public documents, is currently closed. You may submit your request to the PDR via email at [pdr.resource@nrc.gov](mailto:pdr.resource@nrc.gov) or call 1-800-397-4209 or 301-415-4737, between 8:00 a.m. and 4:00 p.m. (ET), Monday through Friday, except Federal holidays.

**FOR FURTHER INFORMATION CONTACT:** Amy Snyder, Office of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001; telephone: 301-415-6822; email: [Amy.Snyder@nrc.gov](mailto:Amy.Snyder@nrc.gov)

**SUPPLEMENTARY INFORMATION:**

**I. Introduction**

The NRC is considering a request to amend NYSERDA's Facility Provisional Operating License No. CSF-1 for provisional operation of the Irradiated Nuclear Fuel Processing Plant, located at the WNYNSC in Cattaraugus and Erie Counties, New York, in accordance with Section 50.90 of title 10 of the *Code of Federal Regulations* (10 CFR), "Application for amendment of license, construction permit, or early site permit." Consistent with 10 CFR 51.21, "Criteria for and identification of licensing and

regulatory actions requiring environmental assessments,” the NRC has reviewed the requirements in 10 CFR 51.20(b) and 10 CFR 51.22(c) and determined that an EA is the appropriate form of environmental review. Based on the results of the EA, the NRC is issuing this final FONSI.

The requested changes would amend the Radiation Protection Program for the “retained premises of the licensed area” for modernization and would clarify NYSERDA’s health and safety and other responsibilities under the license. Although portions of the site are actively being decommissioned by DOE under the West Valley Demonstration Project Act, 42 U.S.C. § 2021a note, Pub. L. No. 96-868, 94 Stat. 1347 (1980) (WVDPA), NYSERDA retains responsibility for the portions of the site known as the “retained premises.”

NYSERDA’s Radiation Protection Program license amendment application was submitted on February 6, 2020 (ADAMS Accession No. ML20042D497); on March 11, 2020 (ADAMS Accession No. ML20076C310), NYSERDA resubmitted the amendment application to address the requirements of 10 CFR 50.30, “Filing of application for licenses; oath or affirmation.” The NRC staff completed an initial review of the resubmitted license amendment application on March 30, 2020 (ADAMS Accession No. ML20084G641) and identified areas in which more information was necessary to complete the acceptance review. NYSERDA responded with this additional information by letter dated October 28, 2020 (ADAMS Accession No. ML20311A200). On July 15, 2021 (ADAMS Accession No. ML21202A212), NYSERDA supplemented the application in response to NRC staff requests for additional information that were transmitted by letter dated June 3, 2021 (ADAMS Accession No. ML21118A076). On September 10, 2021 (ADAMS Package Accession No. ML21281A019), NYSERDA supplemented the application in response to the NRC staff requests for additional information that were transmitted by email dated August 27, 2021. On October 12, 2021 (ADAMS Accession No. ML21286A001), NYSERDA supplemented the application in response to the NRC staff October 7, 2021

email request (ADAMS Accession No. ML21281A030) for clarification of its September 10, 2021 response.

Before issuance of the proposed license amendment, the NRC will need to make the findings required by the Atomic Energy Act of 1954, as amended, and the applicable NRC regulations. The NRC has made a determination that the NYSERDA license amendment request involves no significant hazards consideration (NSHC), under the NRC's regulations in 10 CFR 50.92, "Issuance of amendment." This means that provisional operation of the facility in accordance with the proposed amendment would not: (1) involve a significant increase in the probability or consequences of an accident previously evaluated; or (2) create the possibility of a new or different kind of accident from any accident previously evaluated; or (3) involve a significant reduction in a margin of safety.

The NSHC determination was published in the *Federal Register* on March 10, 2021 (86 FR 13762), along with an opportunity to provide comments, request a hearing, or petition for leave to intervene on the proposed amendment.

Because the topics of the NSHC and this EA are related, the EA includes the NRC staff's consideration of the comments received on the initial NSHC determination, which were provided on April 8, 2021, from the West Valley Citizens Task Force and a member of the public (ADAMS Accession Nos. ML21110A058 and ML21110A059, respectively). While many of these comments pertain to ongoing DOE decommissioning and dismantlement activities under the WVDPA and are therefore outside the scope of the requested changes to the NYSERDA Radiation Protection Program for the retained premises, the in-scope comments were addressed in the NRC's EA.

## **II. Environmental Assessment**

### *Description of the Proposed Action*

The proposed action would permit NYSERDA personnel to conduct activities in the retained premises of the WNYNSC under the provisions of an updated Radiation Protection Program. The Radiation Protection Program commitments will ensure

regulatory compliance for any licensed activities NYSERDA may perform in the retained premises. Routine maintenance activities expected to be performed within the retained premises include tree removal, fence repair, foliage trimming or removal, environmental monitoring, utility work, etc. The proposed action is in accordance with the NYSERDA license amendment application, as supplemented.

#### *Need for the Proposed Action*

The proposed action would involve the addition of license conditions to provide additional clarity on NYSERDA's authorities and responsibilities for health and safety of the retained premises of the WNYNSC under the current license and replace existing radiation protection requirements in the license pertaining to the non-SDA, non-WVDP portions of the WNYNSC where licensed radioactive materials are or may be present. The retained premises constitute generally undeveloped or open land portions of the property which may, or may not, contain legacy contamination from previous West Valley plant processes. However, there are currently no ongoing operations in these areas other than general grounds maintenance.

The NRC staff notes that the proposed NYSERDA Radiation Protection Program would not be applicable to the property currently containing the WVDP or the SDA. When DOE completes its activities and turns the WVDP property back over to NYSERDA, significant revision to the Radiation Protection Program will be necessary before NYSERDA assumes responsibility for the remaining WVDP facilities. The radiation protection requirements for the SDA are established by the State of New York and outside of the NRC's jurisdiction. As such, the NRC staff limited its review to the current proposed NYSERDA Radiation Protection Program while also establishing a license condition that the Radiation Protection Program be reviewed, revised, and submitted for regulatory approval prior to NYSERDA assuming responsibility for any facilities that are currently part of the WVDP.

#### *Comments on the Proposed Action*

NYSERDA maintains that the radiation protection provisions contained within the current Final Safety Analysis Report, which is referenced in the license: (1) have not been updated since 1964; (2) were intended to apply to the irradiated nuclear fuel processing plant (which is not considered part of the retained premises); and (3) are not appropriate for the planned maintenance and other licensed activities in the relatively undeveloped areas of the retained premises. The proposed update to the NYSERDA Radiation Protection Program would commit NYSERDA to the current version of 10 CFR Part 20, "Standards for Protection Against Radiation," for the purpose of providing radiation protection programs and procedures in the retained premises of the WNYNSC.

The NRC received comments related to the potential for use of the current version of the 10 CFR Part 20 requirements to allow higher radiological releases to the environment than presently permitted for the West Valley facility. Specifically, the comments raise a concern that the use of effective dose equivalents pursuant to 10 CFR Part 20, instead of the previous dose equivalent calculations that limit the public dose to 25 millirem per year (mrem/yr) whole -body exposure, or 75 mrem/yr to the thyroid, or 25 mrem/yr to any other organ, would allow a higher public exposure limit than that currently in effect for West Valley. The NRC staff notes that the dose equivalent limits referenced in the comment (25/75/25 mrem/yr to a member of the public) are those applicable to low-level waste facilities and disposal sites as described in 10 CFR 61.41, "Protection of the general population from releases of radioactivity," as well as to fuel cycle facilities as outlined in the U.S. Environmental Protection Agency's regulations at 40 CFR 191, "Environmental Radiation Protection Standards for Management and Disposal of Spent Nuclear Fuel, High-Level and Transuranic Radioactive Wastes."

However, the retained premises of the WNYNSC are not considered a low-level waste facility, a disposal site, or a fuel cycle facility. Therefore, as long as the proposed Radiation Protection Program is not applicable to the WVDP or the SDA portions of the

site, the use of the effective dose equivalent limits under the current 10 CFR Part 20 requirements is appropriate for the retained premises. The NRC staff notes that when NYSERDA assumes responsibility for the remaining WVDP facilities upon completion of the DOE decommissioning and dismantlement activities, the public dose limits applicable at that time to those additional portions of the site would need to be reflected in a future update to the NYSERDA Radiation Protection Program.

The NRC also received comments related to the potential for previous contamination events or releases from WVDP activities to impact the retained premises of the WNYNSC. A similar comment was received related to ongoing and future WVDP decommissioning and demolition work that have the potential to cause accidents or spills that could impact the retained premises, and the need for NYSERDA to evaluate the potential for adverse consequences and be prepared for potential adverse events. The NRC staff previously addressed historical contamination concerns as part of a larger effort undertaken by NYSERDA to characterize and analyze offsite radioactivity after aerial surveys indicated residual radioactivity levels above background. Specifically, the NRC produced a Technical Evaluation Report, dated April 9, 2018 (ADAMS Package Accession No. ML18087A663), which indicated that the risk of offsite residual radioactivity is extremely low, while recognizing that historical releases did lead to contamination of offsite lands. The Technical Evaluation Report noted that much of this offsite radioactivity appears to have since dispersed in the environment and is at very low levels.

In addition, the NRC staff notes that the retained premises of the WNYNSC are generally undeveloped areas inadvertently contaminated by WVDP legacy operations, with very limited exposure pathways for this contamination to be released offsite. As such, it is unlikely that the proposed NYSERDA activities under the Radiation Protection Program would produce any radiological effluent emissions of note. If an effluent were released, it would generally be constrained by the NRC's constraint for air emissions, which is 10 mrem/yr total effective dose equivalent (TEDE), and/or use the

10 CFR Part 20, Appendix B, “Annual Limits on Intake (ALIs) and Derived Air Concentrations (DACs) of Radionuclides for Occupational Exposure; Effluent Concentrations; Concentrations for Release to Sewerage,” effluent limit, which is 50 mrem/yr TEDE. Both of these limits are considerably less than the 100 mrem/yr TEDE dose limit for members of the public.

In terms of the potential for DOE’s ongoing WVDP activities to impact the retained premises of the WNYNSC, any unanticipated events or potential releases that could impact any areas outside the WVDP, including the retained premises, will continue to be addressed under DOE’s radiation protection programs and requirements for the WVDP, as specified by the WVDPA and other applicable regulations. Because the proposed NYSERDA Radiation Protection Program is not applicable to the WVDP areas of the site, DOE radiation protection provisions will govern any decommissioning or demolition impacts on the retained premises as part of DOE’s remediation efforts.

#### *Environmental Impacts of the Proposed Action*

The NRC completed its evaluation of the proposed action and determined that the proposed updates to the NYSERDA Radiation Protection Program for the retained premises of the WNYNSC would not significantly increase the probability or consequences of any accidents. In addition, the proposed action would not significantly change the types and the amounts of any effluents that may be released offsite. There would also be no significant construction or land disturbance activities or increase in occupational or public radiation exposure. Therefore, there would be no significant radiological environmental impacts associated with the proposed action.

The proposed action would not impact land, air, or water resources, including biota. In addition, the proposed action would not result in any socioeconomic or environmental justice impacts or impacts to historic and cultural resources. Therefore, there would also be no significant non-radiological environmental impacts associated with the proposed action.



Accordingly, the NRC concludes that the proposed action (license amendment) would not result in significant environmental impacts. Details of the NRC's evaluation will be provided in a letter to the licensee approving the license amendment.

#### *Environmental Impacts of the Alternatives to the Proposed Action*

As an alternative to the proposed action, the NRC staff considered denying the proposed action (i.e., the "no-action" alternative). Under the no-action alternative, the NRC would not approve the NYSERDA Radiation Protection Program for the retained premises of the WNYNSC or the license amendment request because the associated regulatory requirements have not been met. Consequently, there would be no change to the current radiation protection requirements applicable to the retained premises, and NYSERDA would continue to face challenges with conducting maintenance activities under an outdated Radiation Protection Program. If the NRC was unable to approve the NYSERDA Radiation Protection Program because the regulatory requirements were not met, then the licensee would have to take the necessary actions to ensure the applicable radiation protection regulations are met.

#### *Alternative Use of Resources*

The proposed action would not involve the use of any resources.

#### *Agencies and Persons Consulted*

The staff consulted with the State of New York regarding the environmental impact of the proposed action on September 2, 2021. The State of New York responded on September 17, 2021 with no comments (ADAMS Accession No. ML21281A089).

### **III. Finding of No Significant Impact**

Based on its review of the proposed action, and in accordance with the requirements in 10 CFR Part 51, "Environmental Protection Regulations for Domestic Licensing and Related Regulatory Functions," the NRC staff has determined that pursuant to 10 CFR 51.31, "Determinations based on environmental assessment," preparation of an environmental impact statement is not required for the proposed action

and pursuant to 10 CFR 51.32, "Finding of no significant impact," a FONSI is appropriate.

On the basis of the information presented in this EA, the NRC concludes that the proposed action would not cause any significant environmental impact and would not have a significant effect on the quality of the human environment. Accordingly, the NRC has determined not to prepare an environmental impact statement for the proposed action.

Other than the licensee's letter dated March 11, 2020, as supplemented, there are no other environmental documents associated with this review. These documents are available for public inspection as previously indicated.

Dated: November 1, 2021.

For the Nuclear Regulatory Commission.

Bruce A. Watson, Chief,  
Reactor Decommissioning Branch,  
Decommissioning, Uranium Recovery  
and Waste Programs,  
Office of Nuclear Material Safety  
and Safeguards.

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